

Agreement on the Conservation of Albatrosses and Petrels

# Third Meeting of the Seabird Bycatch Working Group

Mar del Plata, Argentina, 8 – 9 April 2010

# ACAP Observer Report – IOTC WPEB 2009

## Secretariat

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SBWG-3 Doc 23 Agenda Item 6

### ACAP Observer Report – IOTC WPEB 2009

**Meeting Title:** 5th Meeting of the Ecosystems & Bycatch Working Party

Meeting Organisation: Indian Ocean Tuna Commission

Date and Location: 12 – 14 October, 2009 Mombasa, Kenya

Website Address: http://www.iotc.org/

Your Name/Affiliation: Barry Baker, ACAP Interim Secretariat. Henri Weimerskirch, France

Capacity of Attendance: ACAP representatives

Relevant Paper(s) Tabled:

IOTC-2009- WPEB-13. New information on the distribution of southern seabirds and their overlap with the IOTC zone. H. Weimerskirch

IOTC-2009-WPEB-20. Ecological Risk Analysis.

Working Papers	None			
Background Documents	None			
Information Papers	None			
National Reports	None			

Author(s) and/or Presenter if Different: All papers were presented by the respective

delegations.

#### Summary of Content:

# IOTC-2009- WPEB-13. New information on the distribution of southern seabirds and their overlap with the IOTC zone. H. Weimerskirch

Recent information on the distribution of albatrosses and petrels in the IOTC convention area was presented. Albatrosses and petrels are part of the marine ecosystems, relying entirely on marine resources. They breed on oceanic islands, notably on several islands of the Indian Ocean south of the IOTC zone. The populations of several species have been declining over the past 30 years, and one species, the Amsterdam Albatross, is critically endangered. This decline has been related to bycatch mortality in longline fisheries. The problem of bycatch in the CCAMLR zone in waters surrounding the breeding grounds has been relatively well studied, and measures have been taken in the demersal toothfish fisheries to reduce seabird bycatch. In addition, previous studies have shown that breeding birds of several species fly to subtropical waters 1000-2000 km to the north, where their ranges overlap extensively with the fishing areas of tuna longliners. Demographic models suggest that the decline of all populations, through increased mortality of adults, is related

to longline effort in the IOTC/CCSBT areas. Until now, however, little information was available on the distribution of the non-breeding part of the population, especially juvenile and immature birds that represent half of the total population. Recently, juveniles and immatures of eight species of albatrosses and petrels from Crozet, Kerguelen and Amsterdam Islands were tracked. A surprising result from these studies was that these naïve birds, believed to be very susceptible to bycatch, range much further north than do adult birds. Juvenile and immature ranges overlap completely with the southern part of the IOTC Convention area, as far north as latitude 25°S. This extends markedly the northern range of overlap previously considered (30°S), most importantly it shows that a significant part of these populations rely entirely on the IOTC Convention area during critical parts of their life cycle (Figure 1). An example was presented of a tracked Wandering Albatross that was caught by an Asian longliner. These results underline the need for observer programmes onboard longliners, and for more collaboration between seabird and fisheries scientists working in the southern Indian Ocean. They also highlight the need for IOTC to develop an ecological risk assessment for IOTC fisheries that considers seabird interactions and the vulnerability of birds to the effects of longline fishing.

Summary for the species of albatrosses and large petrels breeding in the southern Indian Ocean susceptible to longline fisheries

Species	IUCN	Trend	Population	Overlap of	Overlap of foraging	Priority for
	Criteria	over 30	size	foraging range of	range non-breeding	gathering
		years	(breeding	breeding adults	adults with IOTC	information on
			pairs/year)	with IOTC zone	zone	bycatch in IOTC
						zone
Amsterdam	CR	+	28	Complete	Complete	+++
albatross						
Wandering	VU	-	8,500	Moderate	High	++
albatross						
Sooty albatross	EN	-	4,900	High	Complete	+++
Light mantled	NT	Stable	7,100	No	Low	+
sooty albatross						
Indian yellow	EN	-	41,500	High	?	+++
nosed albatross						
Black-browed	EN	Stable	4,780	No	High	+
albatross						
Grey-headed	VU	+	24,140	Low	?	+
albatross						
Northern giant	NT	-	3,080	No	High	+++
petrel						
Southern giant	NT	+	6,900	No	Low	+
petrels						
White-chinned	VU	-	~250,000	Moderate	High	++
petrel						
Grey petrel	NT	-	c. 7,000	Moderate	High	+++



**Figure 1.** Combined density distribution of juvenile Sooty Albatross, White-chinned Petrel and Northern Giant-Petrel (blue-grey shading) tracked from the Crozet, Kerguelen and Amsterdam Islands during January-September 2009, showing extensive overlap with the southern sector of the IOTC convention area (pink shading).

#### IOTC-2009-WPEB-20. Ecological Risk Analysis

A Productivity Susceptibility Analysis (PSA) was carried out using data from five Indian Ocean tropical tuna fisheries: EU purse seine (2003-20007), Soviet Union purse seine (1983-1995), Soviet Union longline (1961-1989), Taiwanese longline (2002-2008) and Reunion longline. The PSA showed somewhat similar results for all fleets. Overall, two high risk species groups were identified. One included sharks (both coastal and pelagic) and was characterized by low productivity and high susceptibility values to different fishing gears. The second group included teleosts (both IOTC and non-IOTC species), characterized by higher productivities but high susceptibility to purse seine and longline gear.

In subsequent discussions on the paper and presentation, the WPEB considered that this kind of analysis to be a very useful means of rapidly assessing large numbers of taxa, and identifying potentially vulnerable species that can then be subject to more detailed and rigorous analyses. The importance of both widening and refining the scope of such analyses to include observer data, improved estimates of biological parameters, additional species (i.e. marine turtles, seabirds and additional sharks), and information from other fisheries (such as gillnet fisheries) was noted.

#### **Discussions on Seabird Bycatch**

There were discussions on the existing conservation measure for pelagic longline gear, ecological risk assessments for seabirds in the IOTC convention area, a review of NPOA-Seabird plans and observer programs and collection of bycatch data. Arising from these discussions, the WPEB made the following recommendations to the Scientific Committee:

- No changes be made to the seabird conservation measures in Resolution 08/03 at this time, but that the WPEB should consider new recommendations based on rigorous scientific evidence at the next meeting in 2010;
- in light of new information on the distribution of juvenile albatrosses and petrels, the area in which longliners are required to use mitigation measures should be extended further north to latitude 25°S;
- Bycatch issues be given appropriate consideration in the development of observer data collection forms, standards and reporting procedures to the Commission;
- The Commission should encourage CPCs to fulfil their FAO obligations to assess the need for NPOAs and develop plans if appropriate
- An ERA process be commenced for seabirds, with work carried out inter-sessionally and at the next meeting of the WPEB, and
- Further Ecological Risk Assessments be carried out on bycatch and other ecologically significant species

#### **Outlook for Future ACAP Involvement:**

Ongoing involvement in the work of the IOTC is recommended. ACAP certainly has a good relationship with the Secretariat and members of the Working Party and it would be productive to build on this to enhance the work of the Agreement.

## **Recommended Actions for ACAP:**

Consult with ACAP Parties who are members of CCSBT in the lead-up to the next Extended Commission meeting to discuss possible approaches that may be taken, particularly in relation to revision of the bycatch mitigation measure (Resolution 08/03) and progressing action on the development of an ecological risk assessment for seabirds.

#### Have relevant papers been forwarded to Secretariat: Yes

Electronic copies of the meeting documents are held by the Secretariat.